PROCESSOR HAVING AN UNSHARED STACK MEMORY

Abstract

A processor includes a CPU, a data memory, a stack memory, a memory address generator, and a stack pointer generator. The CPU is used to process data and instructions. The data memory is used to store non-stack data. The stack memory is used to store stack data. The memory address generator is used to generate addresses for accessing the data memory. The stack pointer generator is used to generate pointers for accessing the stack memory.